

#### OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request. File No. 16-131862-LO

Project Name/Address: Bryant Retaining Wall/5402 119th Ave SE

Planner: Drew Folsom

Phone Number: (425) 452-4441

Minimum Comment Period: July 28th, 2016

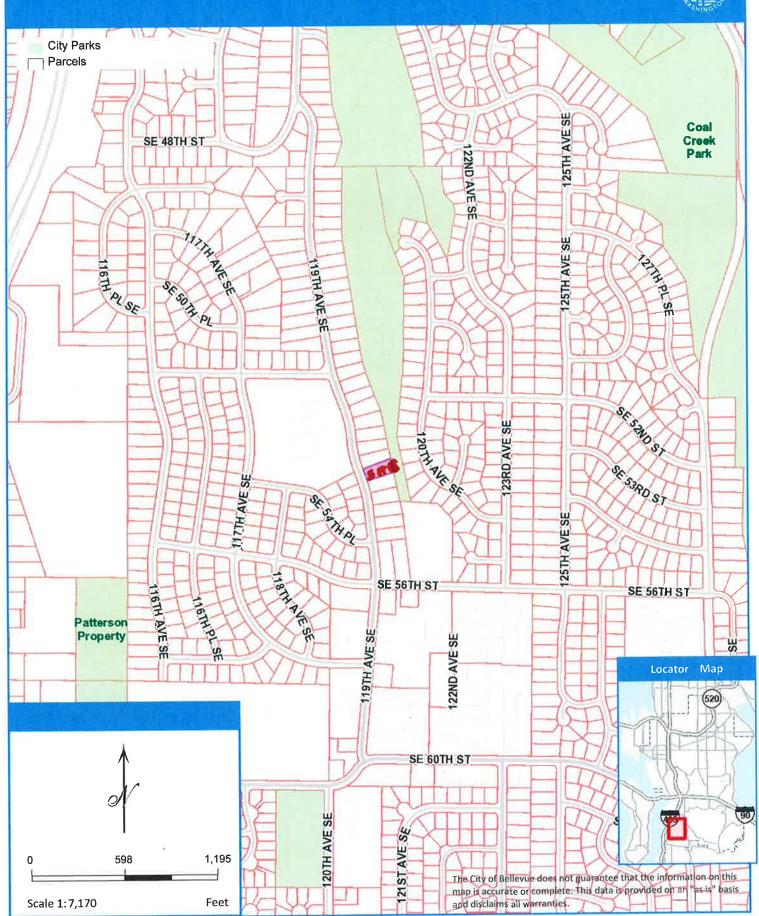
Materials included in this Notice:

$\boxtimes$	Blue Bulletir
$\boxtimes$	Checklist
X	Vicinity Map
X	□□□Plans
	□□□Other:

#### OTHERS TO RECEIVE THIS DOCUMENT:

- State Department of Fish and Wildlife / <a href="mailto:Sterwart.Reinbold@dfw.gov">Sterwart.Reinbold@dfw.gov</a>; <a href="mailto:Christa.Heller@dfw.wa.gov">Christa.Heller@dfw.wa.gov</a>;
- State Department of Ecology, Shoreline Planner N.W. Region / <u>Jobu461@ecy.wa.gov</u>; <u>sepaunit@ecy.wa.gov</u>
- Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
- Attorney General ecvolvef@atg.wa.gov
- Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us





#### **ENVIRONMENTAL CHECKLIST**

10/9/2009

Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service).

### INTRODUCTION Purpose of the Checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.

#### **Instructions for Applicants:**

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer or if a question does not apply to your proposal, write "do not know" or "does not apply." Giving complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include reference to any reports on studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

Use of a Checklist for Nonproject Proposals: A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.

For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.

For nonproject actions, the references in the checklist to the words *project*, *applicant*, and *property* or *site* should be read as *proposal*, *proposer*, and *affected geographic area*, respectively.

Attach an 8  $\frac{1}{2}$ " x 11 vicinity map which accurately locates the proposed site.

#### **BACKGROUND INFORMATION**

Property Owner: Joe Bryant

Proponent: Joe Bryant

5402 119<sup>th</sup> Avenue SE Bellevue, WA 98006

Contact Person: Clover Muters, The Watershed Company

(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: 750 Sixth Street South, Kirkland, WA 98033

Phone: (425) 822-5242

Proposal Title: Bryant Retaining Wall Violation Correction

Proposal Location: 5402 119th Avenue SE Bellevue, WA 98006 (Parcel 6071200960)

(Street address and nearest cross street or intersection) Provide a legal description if available.

Please attach an 8 1/2" x 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

- General description: The project proposes to lower an unpermitted retaining wall in a steep slope buffer, remove fill placed behind the wall, regrade to a slope closer to the pre-impact condition, and mitigate for remaining impacts with native vegetation plantings.
- 2. Acreage of site: 0.37 acres
- Number of dwelling units/buildings to be demolished: 0
- Number of dwelling units/buildings to be constructed: 0
- 5. Square footage of buildings to be demolished: NA
- 6. Square footage of buildings to be constructed: NA
- 7. Quantity of earth movement (in cubic yards): Existing fill to be removed: 128 Cubic Yards, New fill to be imported: 81 Cubic yards of topsoil
- 8. Proposed land use: Residential
- Design features, including building height, number of stories and proposed exterior materials:
   4' cement retaining wall, restoration plantings

Estimated date of completion of the proposal or timing of phasing:

The project will be completed as soon as City approval is received. The proposal offers corrective action for a violation which the city requests be remedied as soon as possible.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- Critical Areas Narrative Description
- Restoration Plan

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

#### None known

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

- City of Bellevue Critical Areas Land Use Permit
- City of Bellevue Clearing and Grading Permit

			y .						
Ple (Pl	ease ease	prov che	ride one or more of the following exhibits, if applicable to your proposal.  sck appropriate box(es) for exhibits submitted with your proposal):						
	Lan	d Us	Use Reclassification (rezone) Map of existing and proposed zoning						
			nary Plat or Planned Unit Development nary plat map						
X	Pla	n of	ng & Grading Permit of existing and proposed og Development plans						
	Rev	iew)	ding Permit (or Design iew) Site plan Clearing & ling plan						
			reline Management Permit plan						
A.	EN'	VIR	RONMENTALELEMENTS						
	1. Earth								
a. General description of the site: Flat Rolling Hilly X Steep slopes Mountains									
		b.	What is the steepest slope on the site (approximate percent slope)?  The steepest slope on site is approximately ~40%. A portion of the site is within a steep slope geohazard area.						
		C.	What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.						
			The USDA Natural Resources Conservation Service maps the majority of the site as Alderwood and Kitsap soils on very steep slopes. The western end of the site, near the existing development is mapped as Arents, Alderwood material on 6 to 15 percent slopes. Currently, the area west of the retaining wall consists of several feet of fill material.						
		d.	Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.						
			The site includes a steep slope geohazard area. The property owner reports that an upper terrace						

area immediately behind the house was originally flat and stable. However, following City road

work in 2006 the land began to slip. The apparent cause of this was a leak in a City pipe which runs along the side of the property and discharges on the slope below. The leak was fixed, however the owner reports the land continues to sink which led to the construction of the retaining wall. During a site visit performed on March 24, 2016, cracks were observed in the new fill placed behind the retaining wall, near the location of the City pipe.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Unpermitted installation of an approximately 10-foot-high, poured in place concrete retaining wall, six-foot board fence and placement of a large quantity of fill behind the wall took place, such that a formerly sloped yard area behind the existing residence on site is now flat. The wall will be reduced to four feet and the yard will be graded to restore the area behind the wall to a slope closer to the pre-impact conditions. A majority of the unpermitted fill will be removed and the area restored with native vegetation.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

The site currently contains exposed fill material and virtually no vegetation behind the wall. No additional vegetation will be removed. Downslope of the wall intact forest is present. Precautions will be taken to avoid erosion during construction through best management practices. The installation of native plants will help reduce the risk of erosion of the restored slope in the future.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

No change in impervious surfaces will occur.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

A series of compost socks will be employed to capture sediment. Exposed soils on the slope will be covered with arborist mulch to allow restoration plantings time to mature.

#### 2. AIR

a. What types of emissions to the air would result from the proposal (i.e. dust, automobile odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Exhaust from equipment and construction vehicles during construction may be emitted. No new air emissions will result from the project once completed.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None known.

c. Proposed measures to reduce or control emissions or other impacts to the air, if any:

Not applicable. All construction vehicles will meet state emission standards.

#### 3. WATER

#### a. Surface

(1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project is in the Newport Area drainage basin. Floodplain presumably associated with Newport Creek is mapped at the very eastern end of the parcel, at the bottom of the steep slope. However, City mapping shows Newport Creek originating north of the project parcel. Newport Creek is a tributary to Coal Creek. It enters the creek just upstream of the crossing under I-405.

No above ground channel was evident at the time of our visit.

(2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If Yes, please describe and attach available plans.

No.

(3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill and dredge material will be placed in or removed from surface water or wetlands. Fill will be removed from the steep slope buffer area.

(4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

(5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

A floodplain is mapped at the eastern edge of the property, however, no work is proposed in the floodplain.

(6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No discharge of waste materials to surface waters will occur.

#### b. Ground

(1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

No ground water will be withdrawn and no water will be discharged to ground water as a result of this project.

(2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged into the ground.

- c. Water Runoff (Including storm water)
  - (1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater from the site will continue to flow down the steep slope at the eastern side of the property. However, new native vegetation will provide improved infiltration of stormwater between the house and the slope. The four-foot retaining wall will include proper drainage capabilities, otherwise no new stormwater improvements are proposed.

(2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

	d.	d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:			
		No additional measures are necessary.			
4.	Plants				
	a.	Check or circle types of vegetation found on the site:			
		deciduous tree: alder, maple, aspen, other			
		X evergreen tree: fir, cedar, pine, other			
		shrubs			
		X grass			
		pasture			
		Crop or grain			
		wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other			
		water plants: water lily, eelgrass, milfoil, other			
		X other types of vegetation			
		Virtually no vegetation is currently present in the recently filled area behind the wall. Down slope of the wall a conifer forest is present with limited understory and ivy on many of the trees. Photographs show the impacted area consisted predominately of grass, ivy and one apple tree prior to impact.			
	b.	What kind and amount of vegetation will be removed or altered?			
		lvy will be removed on the slope behind the retaining wall. The project does not necessitate the removal of any other vegetation, however selective thinning is recommended for the saplings on the forested slope behind the wall in order to improve the health of the conifer forest and allow for the planting of understory vegetation as restoration for project impacts.			
	C.	List threatened or endangered species known to be on or near the site.			
		No threatened or endangered species are known to be on or near the site.			
	d.	Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:			
		A restoration planting plan is proposed which includes 709 square feet of native shrub and groundcover planting in the re-graded buffer area above the wall. Below the wall, additional enhancement of up to 3,318 square feet of the forested slope will take place through sapling thinning, understory shrub planting and invasive species removal which will improve structural and species diversity and enhance wildlife habitat. Species proposed for installation include vine maple, nootka rose, beaked hazelnut, snowberry, kinnikinnick, sword fern and Oregon grape.			
5.	ANIMA	ALS			
	a.	Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:			
		X Birds: hawk, heron, eagle, songbirds, other:			
		Mammals: deer, bear, elk, beaver, other:			
		Fish: bass, salmon, trout, herring, shellfish, other:  DF 7/6/16			
		•			

b. List any threatened or endangered species known to be on or near the site.

No threatened or endangered species are known to be on or near the site.

c. Is the site part of a migration route? If so, explain.

No migration routes are known to occur through the site.

d. Proposed measures to preserve or enhance wildlife, if any:

Native restoration plantings will provide additional cover and foraging opportunities for wildlife.

#### 6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy need? Describe whether it will be used for heating, manufacturing, etc.

The project will not create any new energy needs.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The project will not affect potential solar energy use.

c. What kinds of energy conservation features are included in the plans of the proposal? List other proposed measures to reduce or control energy impacts, if any:

No energy conservation features are necessary.

#### 7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

No.

(1) Describe special emergency services that might be required.

None necessary.

(2) Proposed measures to reduce or control environmental health hazards, if any,

None necessary.

- b. Noise
  - (1) What types of noise exist in the area which may affect your project (for example, traffic, equipment, operation, other)?

Typical residential noise occurs on the property. No noise is expected to affect the project.

(2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The project will not create any new noise other than minor construction noise during modifications to the wall. Construction will occur during normal daytime hours.

(3) Proposed measures to reduce or control noise impacts, if any:

No measures necessary.

#### 8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The site is a residential property with a single family residence and appurtenant features. It is surrounded by other single family residential properties.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

The site contains a single family residence with attached garage and patio, and a storage shed. Currently an approximately 10-foot-high cement retaining wall and board fence is present behind the house which will be modified under this proposal.

d. Will any structures be demolished? If so, what?

The retaining wall will be lowered to 4 feet and the board fence removed.

e. What is the current zoning classification of the site?

The parcel is zoned R-5.

f. What is the current comprehensive plan designation of the site?

The comprehensive plan designation of the site is Single Family High Density (SF-H), up to 5 units per acre.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Yes, a steep slope geohazard area is present on site.

I. Approximately how many people would reside or work in the completed project?

Not applicable.

i. Approximately how many people would the completed project displace?

The project will not displace any people.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

i. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Not applicable. The project will not change the existing land use.

#### 9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Not applicable. No new housing units will be provided.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Not applicable. No housing will be eliminated as a result of the project.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

#### 10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The cement retaining wall will be 4 feet tall.

b. What views in the immediate vicinity would be altered or obstructed?

No views will be significantly altered. The current wall and fence may infringe on the neighboring properties view of the forested slope behind the houses. Lowering the wall will reduce this possibility.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None needed.

#### 11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No new light or glare will be produced by the project.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Not applicable.

c. What existing off-site sources of light or glare may affect your proposal?

No off-site sources of light will affect the proposal.

d. Proposed measures to reduce or control light or glare impacts, if any:

Not applicable.

#### 12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Lake Heights Park which connects to the Coal Creek Natural Area is present just east of the parcel. Newport Heights Elementary School which has ballfields, is located across the street.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Not applicable.

#### 13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None known.

b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.

Not applicable.

c. Proposed measures to reduce or control impacts, if any:

Not applicable.

#### 14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The site is accessed off of 119th Ave SE. Site access will not change as a result of this proposal.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

Yes, there is a bus stop at 119th Ave SE and SE 52nd Street, approximately 0.1 miles north of the site.

c. How many parking spaces would be completed project have? How many would the project eliminate?

Not applicable. The project will not add or eliminate parking spaces.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No. No transportation infrastructure improvements are required as a result of this project.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Not applicable. The completed project will not generate any new vehicular trips.

g. Proposed measures to reduce or control transportation impacts, if any:

Not applicable.

#### 15. Public Services

a. Would the project result in an increased need for the public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No, the project will not result in an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any:

Not applicable.

#### 16. Utilities

- a. Circle utilities currently available at the site electricity, natural gas, water, refuse service, telephone, sanitary sewer septic system, other.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

#### Not applicable. No utilities are proposed for the project.

Signat	ure
	The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.
	SignatureDate Submitted5-6-16

DF 7/6/16

Ph. 253-896-1011 Fx. 253-896-2633 5007 Pacific Hwy E., Suite. 16 Fife, Washington 98424

December 30, 2015

Mr. Joe Bryant 5402 – 119<sup>th</sup> Avenue SE Bellevue, Washington 98006

Geotechnical Consultation (2)
Residential Site Stabilization Wall
5402 – 119<sup>th</sup> Avenue SE
Bellevue, Washington
Job: Bryant.119thAvSE.L2

At your request, we revisited your property to observe the constructed concrete retaining wall in the rear upper portion of your property. We understand that following our 2011 site visit that identified slope stability issues related to a failed City of Bellevue storm drainage line located on the north side of your property, the City repaired the failed storm line. However, the City did not restore or stabilize the adjacent soil settlement areas on your or your neighbors properties or the ground ruptures that extended into the slope area and landscape walls below.

We further understand that following the repair of the storm line, settlement and ground movement continued in these areas, as we expected and discussed, because of the adjusting disturbed soil conditions around the pipe and on the slope. We also understand that you and your neighbor filled the settlement depressions and ground ruptures with soil material for some time after the repair of the utility line. Because the soils in the rear portion of your lawn area and slope continued to settle, you were required to take further measures to stabilize the area, thus the concrete retaining wall a significant expense. Based on our recent discussions, as you prepared to install the wall, you decided to extend the wall the remaining distance to the south property line, thus stabilizing the slope on your property, and provide the opportunity to re-level the rear portion of your yard.

We understand that the wall contractor neglected to acquire the necessary permits from the City, and you have been advised of the violation with a "Stop Work" order from the City, and "Order of Corrective Action". This would seem somewhat incongrues as the necessity of the slope repair and stabilization wall were the result of a failed City utility line. And although they did repair the leaking/piping storm line, they did not remediate the damage to the adjacent properties.

Relative to the two "options" provided by the City to rectify the corrective action and remove the stop work, both require the removal of the existing concrete retaining wall? It should be noted that the wall, although located in the buffer area, is not in the steep slope area. Further, no significant trees were removed or damaged during the installation of the wall. A single small apple tree was removed for equipment access. It is obvious that care was taken to protect the slope area below, and the vegetation. Removal of the existing wall would certainly damage the vegetation and result in a significant exposed soils area with a severe erosion potential. AND return the slope area to the previous unstable condition, that resulted because of the failed utility line. We recommend that the wall remain in its current configuration and that the typical erosion control be allowed to be finished (landscaping).

Bryant.119thAvSE December 30, 2015 Page 2

We trust this information is sufficient for your needs. If you have any questions, or require additional information, please contact us.

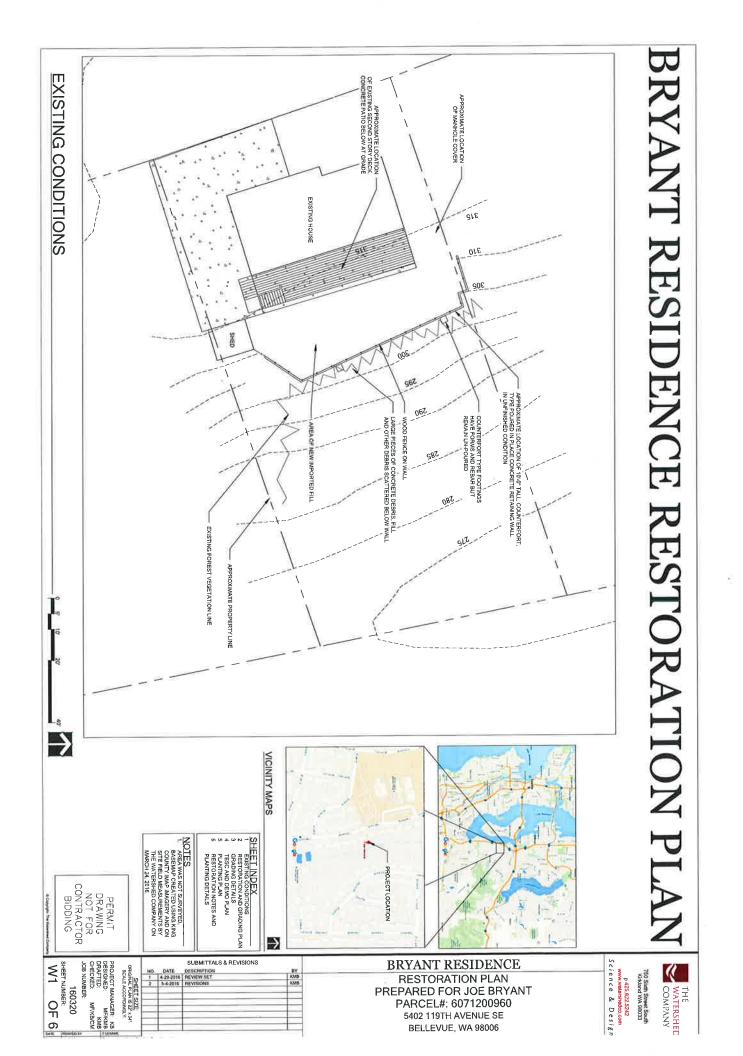
Respectfully submitted, GeoResources, LLC

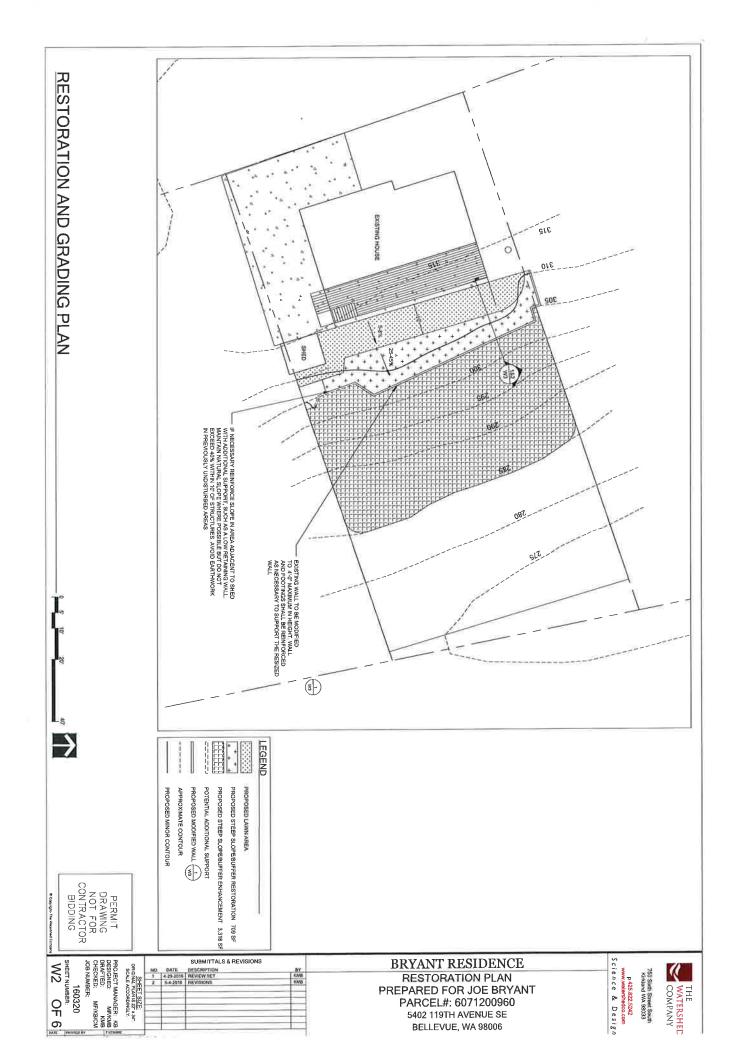


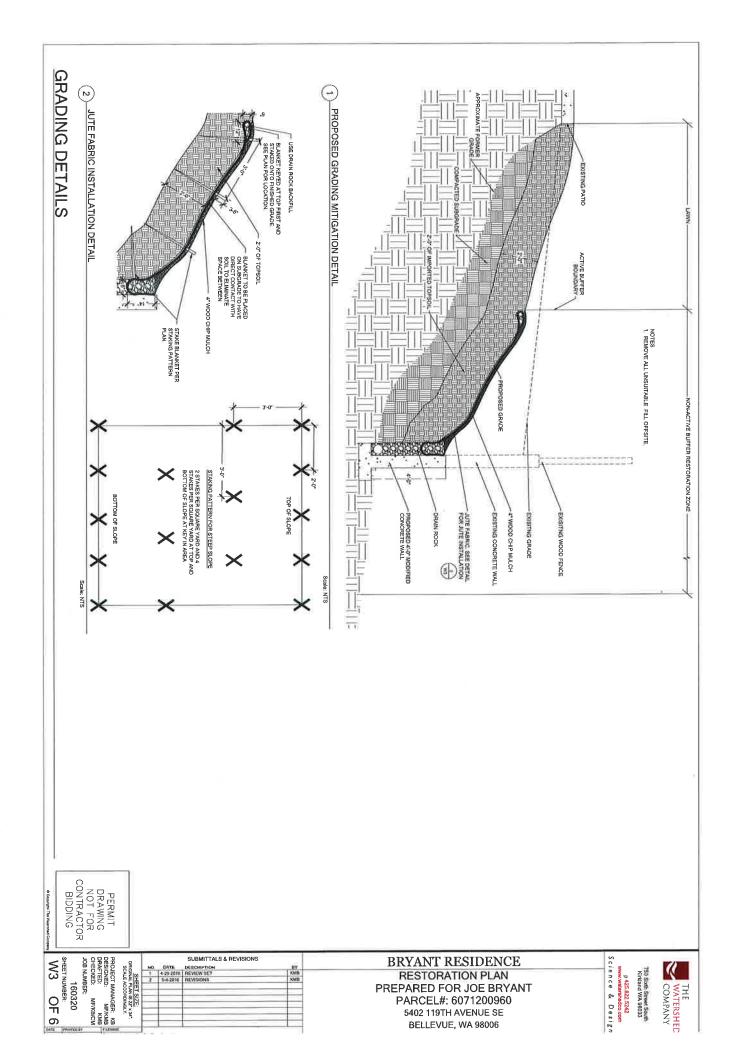
Dana C. Biggerstaff, PE Sr. Engineer

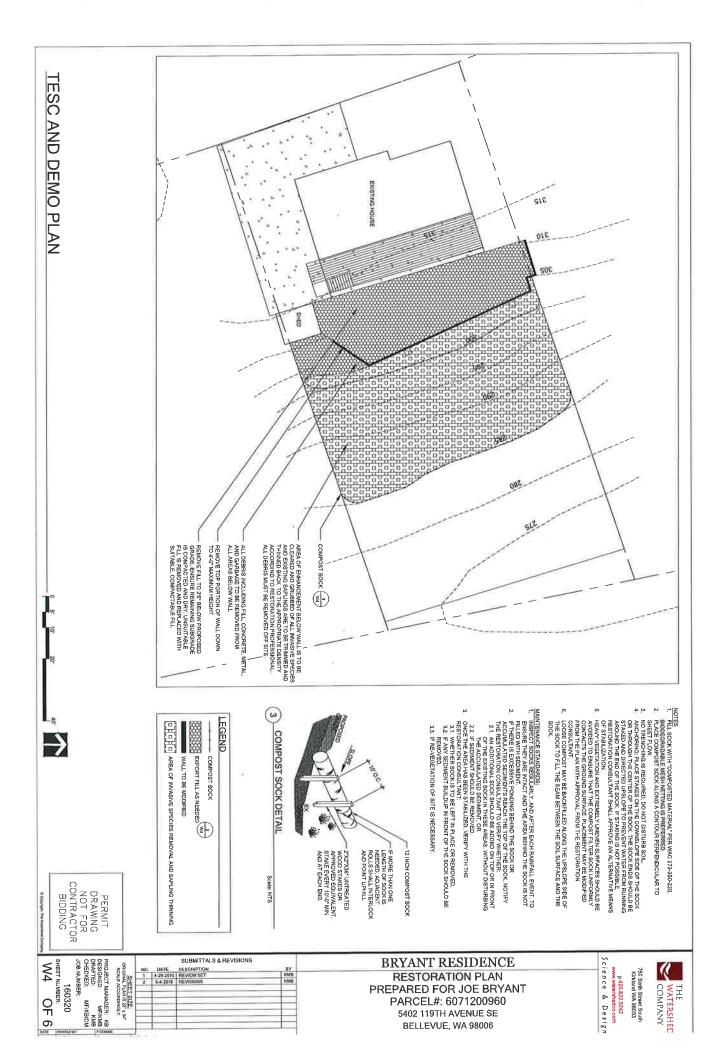


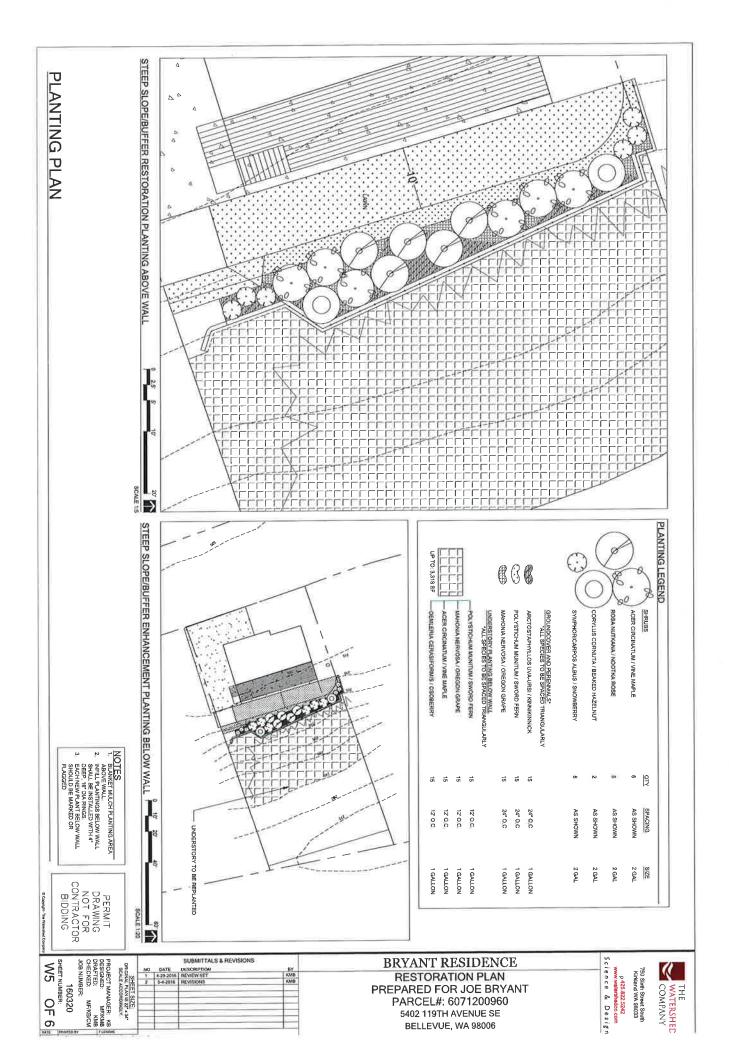
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### OVERVIEW

THE PROPOSED RESTORATION PLAN FULFILLS THE REQUIREMENTS OF LUC 20 25H 220. THE PLAN SEEKS TO RESTORE AND ENHANCE SUSSTAMFLA, PORTIONS OF THE OWNTRE STEEP SLOPE CRITICAL, AREA, AND MEPER THE FULM SEEKS TO INCREASE THE OWNLTY OF THE MATTER USECTATION COMMUNITY IN THE IMPACTED AREA, AGOVE PREAMPACT CONDITIONS PRIOR TO THE MALL CONSTRUCTION, THE STEEP SLOPE AND STEEP

TO ACHIECT HE ENHANCEMENT OBJECTIVES, THE PLANCALLS FOR REGISADING THE IMPACTED AREA. TO A MORE INVITAGAL SOCIETA MER PRETORISH OTHER STEEDS AREA. TO A MORE INVITAGAL SOCIETA MER PRETORISH OTHER STEEDS AS IOPE BUFFER ABOVE THE WALL, WITH MATUTE SHAUB AND GROUNDCOVERS PRECIES AN ADDITIONALLY 318 GOLARE EETE BELOOF HE WALL, WILL BE HENANCED HEROLISH MASKING SPECIES REMOVAL, SAPLING THINNING AND UNDERSTORY NATIVE SHAUB AND GROUNDCOVER PLANTING.

# MAINTENANCE AND MONITORING PLAN

THE SITE WILL BE MAINTAINED AND MONITORED FOR AT LEAST THREE YEARS TO BUSINES SLOCESS OF THE RESTORATION AREA, COMPONENTS OF THE 3YEAR MAINTENANCE AND MONITORING PLAY MERGEFILLED BELOW, DUE TO THE OFFICULTY OF ACCESS PARTICULARLY AFTER THE RESTORATION AREA, ASDU'E THE WILL IS ESTABLISHED THIS MANTENANCE AND MONITORING PLAN DOES NOT APPLY TO THE ENHANCEMENT AREA PROPOSED BELOW THE WALL. CONSTRUCTION NOTES AND SPECIFICATIONS

ESTABLISH A DIVERSE MATIVE VEGETATION COMMUNITY ON THE STEEP
 SLOPE AND IN THE BUFFER UPSLOPE OF THE WALL, OF GREATER QUALITY THAN THE PRE-EXISTING CONDITION.

# PERFORMANCE STANDARDS 2) REMOVE AND CONTROL ALL NON-NATIVE INVASIVE VEGETATION.

THE STANDARDS LISTED BELOW WILL BE USED TO JUDGE THE SUCCESS OF THE INSTALLATION OVER TIME. IF PERFORMANCE STANDARDS ARE MET AT THE END OF YEAR, THE SITE WILL THEN BE DEBENDD SUCCESSOFUL MUD THE DEBEND SHOULD SERVED. WILL THE END DEPENDENCE SERVED, WILL THE PROPERTY OF THE CITY OF

# SURVIVAL STANDARDS:

- ACHIEVE 100% SURVIVAL OF INSTALLED PLANTS BY THE END OF YEAR 1. THIS STANDARD CAN BE MET THROUGH PLANT ESTABLISHMENT OR THROUGH REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.
- .80% SURVIVAL OF INSTALLED CONTAINER PLANTINGS IN ALL AREAS AT THE ENJO OF YEAR 2. THIS STANDATO MAY BE MET THROUGH SSTABLISHMENT OF INSTALLED PLANTS OR BY REPLANTING AS NECESSARY TO ACHEVE THE REQUIRED NUMBERS

## NATIVE SHRUB COVER:

- , ACHIEVE 40% UNDERSTORY COVER OF NATIVE SHRUBS BY YEAR 2, NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD
- ACHIEVE 60% UNDERSTORY COVER OF NATIVE SHRUBS BY YEAR  $3\,$  NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
- 3) NATIVE PERENNIAL AND GROUNDCOVER COVER:
- ACHIEVE 50% COVER OF NATIVE PERENNIALS AND GROUNDCOVER BY YEAR 2 NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD
- ACHIEVE 70% UNDERSTORY COVER OF NATIVE PERENNIALS AND GROUNDCOVER BY YEAR 3., NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
- SPECIES DIVERSITY: ESTABLISH AT LEAST THREE MATIVE SHRUB SPECIES AND TWO NATIVE GROUNDCOVER SPECIES BY YEAR 3, NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS STANDARD.
- INVASINE COVER AERUL COVER FOR ALL NON-MATINE INVASINE AND NOVIDUS MEEDS MULL NOT EXCEED 19% AT ANY SERA DURING THE MONITORING TERMOD, INVASINE PUANTS INCLUDE BUT ARE NOT LIMITED TO HIMALY AND BUCKSERRY (FURBUS ARMENIACUS). ENGLISH HOLLY (ILEX ACUPOLUM), ARMOY SEPCIES (INDERA, SEP).

# MONITORING METHODS

THIS MOMITORING PROGRAM IS DESIGNED TO TRACK THE SUCCESS OF THE RESTORATION OVER TIME AND TO MEASURE THE DEGREE TO WHICH IT IS MEETING THE PERFORMANCE STANDARDS OUTLINED IN THE PRECEDING SECTION

AM AS-BUILT PLAN WILL DE PREPARED BY THE RESTORATION PROFESSIONAL THE WATER-BED COMBANY (1951) BEASON THE OF DITHER PERSON FOULD FOR THE PERSON PROPARED PROPARED PROPARED PROFESSIONAL OF PLANS INCLUDED IN THIS PLAN SET. THE AS-BUILT PLAN WILL DOCUMENT AND DEPARTURES IN FAMT PLANSENCY OR OTHER COMBONENTS PROM THE PROPOSEDS PLAN.

MONITORING WILL TAKE PLACE ONCE ANNUALLY IN THE FALL FOR THREE YEARS YEAR: MONITORING WILL COMMENCE IN THE FIRST FALL SUBSEQUENT TO "NSTALLATION."

THE FORMAL MONITORING VISIT SHALL RECORD AND REPORT THE FOLLOWING IN AN ANNUAL REPORT SUBMITTED TO THE CITY OF BELLEVUE:

RESTORATION NOTES AND PLANTING DETAILS

1) VISUAL ASSESSMENT OF THE OVERALL SITE.

2)

- YEAR-1 COUNTS OF LIVE AND DEAD PLANTS BY SPECIES YEAR-2 THROUGH YEAR-3 COUNTS OF ESTABLISHED NATIVE TREES BY SPECIES
- COUNTS OF DEAD PLANTS WHERE MORTALITY IS SIGNIFICANT IN ANY MONITORING YEAR.
- 4) ESTIMATE OF NATIVE COVER IN TREE AND SHRUB PLANTED AREAS.
- ESTIMATE OF NATIVE COVER IN PERENNIAL AND GROUNDCOVER PLANTED AREAS.
- 6) ESTIMATE OF NON-NATIVE, INVASIVE WEED COVER SITE WIDE. TABULATION OF ESTABLISHED NATIVE SPECIES, INCLUDING BOTH PLANTED AND VOLUNTEER SPECIES.
- ANY INTRUSIONS INTO OR CLEARING OF THE PLANTING AREAS, VANDALISM, OR OTHER ACTIONS THAT IMPAIR THE INTENDED FUNCTIONS OF THE RESTORATION AREA PHOTOGRAPHIC DOCUMENTATION FROM AT LEAST THREE FIXED REFERENCE POINTS
- 10) RECOMMENDATIONS FOR MAINTENANCE OR REPAIR OF ANY PORTION OF THE RESTORATION AREA.

NOTE: SPECIFICATIONS FOR ITEMS IN BOLD CAN BE FOUND BELOW UNDER "MATERIAL SPECIFICATIONS AND DEFINITIONS."

NOTE: THE WATERSHED COMPANY ((425) 822-5242] PERSONNEL OR OTHER PERSONS QUALIFIED TO EVALUATE ENVIRONMENTAL RESTORATION PROJECTS WILL MONITOR.

- 1 ALL SITE PREPARATION a SOIL PREPARATION
- **b MULCH PLACEMENT**
- PLANT MATERIAL INSPECTION
- a PLANT MATERIAL DELIVERY INSPECTION

## GENERAL WORK SEQUENCE 6 100% PLANT INSTALLATION INSPECTION

- 1. ALL PLANT INSTALLATION IS TO TAKE PLACE DURING THE DORMANT SEASON (OCTOBER 15TH MARCH 1ST), FOR BEST SURVIVAL
- 2 PREPARE A PLANTING PIT FOR EACH PLANT AND INSTALL PER THE PLANTING DETAILS.
- 3. MULCH THE TREE AND SHRUB PLANTED AREA WITH WOOD CHIP MULCH, FOUR INCHES THICK

# MATERIAL SPECIFICATIONS AND DEFINITIONS

- FERTILIZER SOM BELESE GRANLLAG PINOSPHOROUS-REE FERTILIZER
  FOLLOW MANUFACTURES NISTRICTIONS FOA PAPULATION KEEP
  FERTILIZER MA WEATHER-TICHT CONTAINER WINLE ON SITE MOTE THAT
  FERTILIZER IS TO BE APPLED ONLY IN YEARS 2 THROUGH 3 AND NOT IN THE
  FRIST YEAR
- 2 I RRIGATION ENGREY, THE HOWEQNINER WILL ENSURE THAT WATER IS PROVIDED FOR THE ENTRE FOR MICE AREA WITH A MINIMULAD OF JUDICIES OF WATER PROVIDED PER WEEK FROM JUNIE IT THROUGH SEPTEMBER QUIFOR THE FRIST THO YEARS FOLLOWING INSTILLATION LESS WATER IS NEEDED DURING MARCH, PERL, MAY FAND COTOBER.
- RESTORATION PROFESSIONAL: WATERSHED COMPANY (925) 822-5042)
  PERSONNEL OR OTHER PERSONS QUALIFIED TO EVALUATE ENVIRONMENTAL
  RESTORATION PROJECTS.
- TOPSOIL TOPSOIL SHALL BE IMPORTED AND SHALL BE CEDAR GROVE OR AN APPROVED EDWARD THE RESTORATION SPECULIST. THE PLANTANS SOLI MAY APPROVED EDWARD THE RESTORATION SPECULIST. THE PLANTANS SOLI MAY SHALL CONSIDER TO BE AND ART THE PLANTANS SOLI MAY APPROVED TO THE SHAPE WOULD THE SHAPE THE SHAPE AND THE SHAPE THE SHAPE SHAPE SHAPE SHAPE THE SHAPE SHAPE SHAPE THE SHAPE SHAPE SHAPE SHAPE THE SHAPE SHAPE

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SOIL SHALL HAVE PH RANGE OF 5.5 TO 7.5 WITH DOLOMITE LIME, SULFUR OR OTHER AMENDMENTS ADDED PRIOR TO DELIVERY AS NECESSARY TO ATTAIN THIS RANGE.

#200 0-10

SK GESSE AB FOR THE ECONOMY. SILL DAYS OF CHEMICAL STATEMENTS OF GROWN THAT STATEMENT OF STATEME

BARK OR WOOD CHIPS WHEN TESTED SHALL BE ACCORDING TO WISDOT TEST WELTHOON 128 PRIOR TO PLACEMENT AND SHALL WEET THE FOLLOWING LOOSE VOLUME GRADATION:

[Stage Store: | December 2015.]

No.4	2		SES BABIC
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8	100	Masimum	Parente

## CONTINGENCIES

IF THESE IS, A SCHIEFCANT FROBLEM WITH THE RESTORATION AREAS HEETING PERFORMANCE STAMBADES, A CONTINGENCY PLA MY LIE E EDYELOPED AND IMPLEMENTED, CONTINGENCY PLANS CAMINICUUSE BUT ABE NOT IMPTED TO SOIL AMEROMENT, ADDITIONAL PLANT INSTALLATION, AND PLANT SUBSTITUTIONS OF TIPES JETE, DULMITT, AND LOCATION.

### MAINTENANCE

THE SITE WILL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING INSTRUCTIONS FOR THREE YEARS FOLLOWING COMPLETION OF THE CONSTRUCTION.

THE WATERSHED COMPANY

- 1) FOLLOW THE RECOMMENDATIONS NOTED IN THE PREVIOUS MONITORING SITE VISIT.
- 2) OBJERAL WEEDING FOR ALL PLANTED AREAS:
- A (TLEST TIMICE YEARLY SERVORE ALL COMPETING WEEDS AND MEED ROOTS

  FROM BERNATH SCHINIST LUED DAN'T AND ANY DESIGNELE YOUNTEERS

  YEARD, PION TO A DISTANCE OF 18 NICHES FROM THE MAN PLANT STEM

  WEEDING SHOULD OCCUPAN LEAST TWICE DURING THE SPRING AND

  SUMMER FREQUENT MEEDING WILL RESULT IN LORD RIGHT WORTHLY TO OMER

  PLANT REPLACEMENT COSTS, AND INCREASED LINELI MOOD THAT THE PLAN

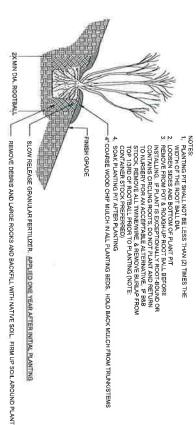
  MEETIS PERPORAMOES STANDARDS BY YEAR 3.

  MEETIS PERPORAMOES STANDARDS BY YEAR 3.

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- MORE FREQUENT WEEDING MAY BE NECESSARY DEPENDING ON WEED CONDITIONS THAT DEVELOP AFTER PLAN INSTALLATION.
- C, DO NOT WEED THE AREA NEAR THE PLANT BASES WITH STRING TRIMMER (WEED WHACKERWEED EATER). NATIVE PLANTS ARE EASILY DAMAGED OR KILLED, AND WEEDS EASILY RECOVER AFTER TRIMMING.
- SELECTIVE APPLICATIONS OF HERBICIDE MAY 8E NEEDED TO CONTROL
  INVASIVE WEEDS, ESPECIALLY WHEN INTERMIXED WITH MATIVE SPECIES,
  HERBICIDE APPLICATION, WHEN INCCESSARY, SHALL BE CONDUCTED ONLY BY
  A STATE-LICENSED APPLICATOR.
- APPLY SLOW RELEASE GRANULAR FERTILIZER TO EACH INSTALLED PLANT ANNUALLY IN THE SPRING (BY JUNE 1) OF YEARS 2 THROUGH 3.
- REPLACE MULCH AS NECESSARY TO MAINTAIN A 4-INCH-THICK LAYER, RETAIN SOIL MOISTURE, AND LIMIT WEEDS
- REPLACE EACH PLANT FOUND DEAD IN THE SUMMER MONITORING VISITS DURING THE UPCOMING FALL DORMANT SEASON (OCTOBER 15 TO MARCH 1)
- THE KOMEGNMER WILL ENSURE THAT WATER IS PROVIDED FOR THE ENTIRE PLANTED AREA WITH A MINIMUM OF SUNCHES OF WITHER PROVIDED PER WEIGH FROM JUNE IT THROUGH SEPTIEMERS 30 FOR THE FIRST TWO YEARS POLLOWING MSTALLATION LESS WATER IS NEEDED DURING MIRCH, APRILL MAY AND OCTOBERS.



KVB

4 CONTAINER PLANTING ON SLOPE Scale: NTS

DRAWING NOT FOR CONTRACTOR BIDDING PERMIT

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SHEET NUMBER: გ

OF 6

PROJECT MANAGER: KB
DESIGNED: MF/KMB
DRAFTED: KMB
CHECKED: MF/KB/CM SHEET SIZE: ORIGINAL PLAN IS 22" x 34" SCALE ACCORDINGLY

JOB NUMBER: 160320

SUBMITTALS & REVISIONS

PARCEL#: 6071200960 5402 119TH AVENUE SE

BRYANT RESIDENCE

BELLEVUE, WA 98006

RESTORATION PLAN PREPARED FOR JOE BRYANT